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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,452

08/21/2003

Paul Atkinson

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06/27/2005

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EXAMINER

NGUYEN, HUY D

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,452

Applicant(s)

ATKINSON, PAUL

Examiner

Huy D. Nguyen

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-14 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-14, drawn to authentication, classified in class 455, subclass 411.

Group II. Claims 15-17, drawn to carrier wave repeater, classified in class 455, subclass 7.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the subcombination has separate utility such as retransmitting from a user's telephone.
3. During a telephone conversation with Julio Loza on 6/22/2005 a provisional election was made to prosecute the invention of group I, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Holcman et al. (US 2003/0108007 A1).

Regarding claims 1 and 14, Holcman et al. teaches a method comprising: receiving a first acoustic transmission from a phone (e.g., the result SRES is sent by the mobile station to the network); receiving a secondary acoustic transmission over a secondary path (e.g., second mobile network receives authentication code from the first mobile network); matching the first acoustic transmission to the second acoustic transmission (e.g., comparing the SRES sent from the mobile station with that calculated by the network) (see abstract and paragraph [0066]).

Regarding claim 2, Holcman et al. teaches the method as claimed in claim 1, and further comprising: decoding an acoustic mark contained within the second acoustic transmission; and associating the acoustic mark with the first acoustic transmission (see abstract and paragraph [0066]).

Regarding claim 6, Holcman et al. teaches the method as claimed in claim 2, wherein the association between the acoustic mark and first acoustic transmission is extended to include links to information relating to a user of the phone (e.g., a locally stored copy of Ki).

Regarding claim 7, Holcman et al. teaches the method as claimed in claim 6, wherein the information is selected from a group comprising the user's telephone number, a stored user profile, user phone inputs, other marks and the source of the acoustic transmission (e.g., a locally stored copy of Ki).

Regarding claim 8, Holcman et al. teaches the method as claimed in claim 2, wherein the association between the acoustic mark and the first acoustic transmission triggers another transaction (e.g., the mobile station is authenticated).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holcman et al. in view of Bolgiano et al. (U.S. 5,859,879).

Regarding claim 3, Holcman et al. teaches the method as claimed in claim 2 except that multiple secondary acoustic transmissions are received and processed to identify a best match between the first acoustic transmission and one of the secondary acoustic transmissions.

However, the preceding limitation is taught in Bolgiano et al. (see column 17, lines 9-25). It would have been obvious to one having ordinary skill in the art, at the time of the invention, to apply the teaching of Bolgiano et al. to the teaching of Holcman et al. in order to reduce fading and simplify receiver design.

6. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holcman et al.

Regarding claims 9 and 10, Holcman et al. teaches the method as claimed in claim 8 except that the transaction is sending a voice response to the user. However, it would have been

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an obvious matter of design choice to send a voice response to the user since the invention would perform equally well regardless of the type or response.

Regarding claims 11, 12, and 13, Holcman et al. teaches the method as claimed in claim 1 except that the first and second acoustic transmissions comprise a radio broadcast. However, it would have been an obvious matter of design choice to have first and second acoustic transmissions comprising a radio broadcast since the invention would perform equally well with first and second acoustic transmissions comprise a radio broadcast.

Allowable Subject Matter

7. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the closest prior arts, Holcman et al. and Bolgiano et al., fail to teach the method as claimed in claim 3, wherein the number of secondary acoustic transmissions processed to identify the best match is reduced by using information related to a user of the phone.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Williams et al. (US 6,141,531) teaches local wireless communication system with external communications link.

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- Finn et al. (US 6,351,652) teaches mobile communications system and method utilizing impulse radio.
- LeMense et al. (US 6,384,710) teaches apparatus and method for remote convenience message reception and control utilizing frequency diversity.
- Carley (US 6,542,735) teaches method of setting security codes in a cordless telephone system with multiple communication devices.
- Issa (US 5,712,638) teaches multiple transmission channel group transmitter.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HN
Huy Nguyen


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER